Task Order No.20 USAID Contract No. PCE-I-00-96-00002-00

ASIA AND THE NEAR EAST (ANE) BUREAU ENVIRONMENT OFFICERS' WORKSHOP BALTIMORE, MARYLAND SEPTEMBER 29 - OCTOBER 6, 1998

By Workshop Implementation Team

December 1998

For
USAID Bureau for Asia and the Near East
and
USAID Global Bureau, Center on the Environment

CONTENTS

	onment Officer Workshop – Final Report	
Logistics	· · · · · · · · · · · · · · · · · · ·	1
	ashington v. Field location	
	aknesses	
	For Future Workshops	
Attachments		3
	ANE Environment Officers' Workshop Updates, Sept. 30 – Oct. 5, 1998	
Appendix B:	ANE Environment Officers' Workshop Attendee List	

INTERNATIONAL RESOURCES GROUP



U.S. Agency for International Development Asia and the Near East (ANE) Bureau Environment Officers' Workshop

Baltimore, Maryland September 29 – October 6, 1998

Final Report

Overview

The ANE Bureau held an Environment Officer's Workshop in Baltimore, Maryland, from September 29 – October 6, 1998, in order to strengthen the technical leadership and management of USAID's environmental portfolio in the ANE region. This meeting marked the first time in seven years that regional Environment Officers had a chance to meet with each other and their Washington colleagues to exchange ideas and information concerning their work. One of ANE's primary goals for this conference was to facilitate an exchange of knowledge and views among the Environment Officers on technical subjects of mutual interest, enabling the Officers to strengthen and extend their professional networks. Ninety-five percent of the participants polled agreed that the Workshop met that goal.

Panel discussions were held on nine session topics, covering a wide range of subjects including: water resources management; urban and industrial pollution; decentralization of forestry, biodiversity and coastal resources management; and global climate change. The daily reports summarizing the discussions are given as attachments to this summary report (Appendix A).

The participant group was diverse, including 20 Officers from 11 missions, as well as participants from USAID/Washington, other U.S. Government agencies, and non-governmental organizations, resulting in a rich discussion informed by a wide range of perspectives. The attendee list also is attached (Appendix B) as a reference to help encourage continuing contact and exchange of information among workshop participants.

Logistics

Logistically this workshop was complicated, as it was held in tandem with a workshop of the US-Asia Environmental Partnership; sponsored jointly by the ANE Bureau and the Global Bureau; and composed of ANE sessions, joint AEP and ANE sessions, and an Energy Training Day organized on behalf of workshop participants by the Global Bureau's Center for Environment. In addition, for reasons beyond the control of the conference organizers, the original overseas venue was changed to the US one month prior to the commencement of the event. The organizers contacted about 50 hotels in the Washington/Baltimore area (several more in Denver, Seattle and Hawaii), and ten County Tourism and Convention centers in order to find a suitable available location. Of those hotels and conference facilities, seven were requested to submit proposals, two were chosen as finalists, and the Omni Inner Harbor in Baltimore was eventually selected as the Workshop site.

The contract with the hotel was finalized and signed on September 15, less than two weeks before the start of the conference. At that point, a bulletin was sent to all potential attendees, informing them of

INTERNATIONAL RESOURCES GROUP

the site and requesting that they make their reservations. (Attendees were able to book flights to Baltimore earlier, as soon as it was determined that the Workshop would be held in that city.)

Registration for the Omni was conducted on-line and via fax. Participants could visit the conference website, at www.usaep.org/aep_ane.htm, to download hotel reservation forms, retrieve transportation information to Baltimore, learn about activities in and around Baltimore, and view draft agendas for both ANE and AEP. The website, which US-AEP generously volunteered to create and host, provided an effective means to distribute information and handle participant hotel reservations. Following the conclusion of the workshop, the site was closed.

Baltimore/Washington v. Field Location

The Baltimore/Washington area had the advantage of allowing more USAID/Washington staff to attend the event, which gave field staff an opportunity to meet their Washington-based colleagues, and strengthened the field office/home office relationship. Baltimore was slightly more desirable than Washington, as it is just far enough away from the District to justify overnight stays (and thus less formal evening interchange) for many staff members. An important goal of the Workshop was to insulate attendees from daily office concerns in order to increase both the number of participants and the quality of their participation, as well as to facilitate informal meetings. The Inner Harbor area of Baltimore features several restaurants, museums and shops for evenings and the weekend, which conference attendees seemed to enjoy.

On the other hand, holding the conference in the continental United States took the focus away from field issues and concerns and inevitably made it more Washington-centric. While every effort was made to involve field staff in the panels, in the end the Washington staff representation was stronger, beginning with the choice of speakers for the opening session on Tuesday evening. In response to questions on the Workshop Evaluation, a number of attendees requested a stronger focus on field inputs and views and expanded participation by field staff on panels in future environmental officer workshops.

Strengths/Weaknesses

Because of the diversity of the audience, it was often difficult in this Workshop to distinguish strengths from weaknesses: what one attendee criticized as not useful, the next praised as a valuable opportunity. Some wrote in their evaluations that the Workshop sessions were too vague, while others claimed they were too focused. Nonetheless, the evaluations and feedback from participants was valuable and will help inform planning for any future environment officers workshop. The following are some of the more interesting issues raised by meeting participants.

The agenda of the Workshop was intentionally developed with a separation between technical substance and management process. Whether this is good or bad depends on the goal of the organizers. Such a separation in the Workshop can be seen to continue the separation in practice. On the other hand, the separation allows a clearer definition of each topic, and therefore a clearer explanation of what is involved on the part of the respective staff members.

A second item for consideration in the set-up of the Workshop was the use of in-house experts on panels, rather than outside specialists, which limited input and information, but allowed for freer discussion of internal issues.

Third, the introduction of non-technical topics was unclear in its effect—did it dilute or enhance the meeting?

Suggestions for Future Workshops

Most of the suggestions given here are logistical in nature, as the strengths/weaknesses section gives voice to thoughts or concerns regarding the substantive part of the Workshop. One exception is the following: "The objectives of the Workshop should be more clearly defined and more effectively communicated to participants." The lack of clarity on objectives (due largely to a very short preparation time) was reflected in the uneven quality of the panels. A second suggestion was to hold more breakout or small group discussion sessions, which could foster more discussion and participation.

Others of interest included:

- Plan Workshop at least six months in advance
- Provide more advance notice to presenters and moderators
- Facilitate discussion (even if electronically) between moderators and panelists at least one month in advance
- Hold meeting in the field and get field officers more involved in planning
- Budget to include working lunches
- Budget to include on-site assistance
- Budget to include honoraria and travel expenses for outside speakers

Conclusions

As this was the first such gathering in nearly a decade of ANE Environmental Officers from Washington and the field, there were many issues to be discussed and much information to be shared. This week-and-a-half-long Workshop was fashioned to engage all attendees who wanted to participate, to cover the range of topics that were represented by the participants, and to strike a balance between structured presentations and informal social mixing. Despite the brief lead time, almost everyone who wanted to come attended, and participation was very active. The Workshop evaluation makes clear that the participants generally enjoyed themselves, found the conference professionally valuable, and are looking forward to the next Environment Officers' workshop.

Attachments:

Appendix A: ANE Environment Officers' Workshop Updates, Sept. 30 – Oct. 5, 1998 Appendix B: ANE Environment Officers' Workshop Attendee List

Appendix A

ANE Environment Officers' Workshop Updates,

Sept. 30 – Oct. 5, 1998

Vol. 1 No. 1 September 30, 1998

ANE Environment Officers Workshop Summary

Joint Meeting of ANE and US-AEP Staff Opens in Baltimore

Opening Session Covers Emerging Environmental Issues in Asia and Near East

The Joint Meeting of the Environment Officers from the USAID Bureau for Asia and the Near East (ANE) and the "Tech Reps" and other staff from the field offices of the USAID-led US-Asia Environmental Partnership (US-AEP) opened in Baltimore today. The meeting was attended by 20 Environment Officers from 9 countries and approximately 30

US-AEP field representatives. Another 40 USAID staff from the USAID ANE and Global Bureau's Washington offices as well as invited resource persons also were present.

The meeting was opened John Wilson, ANE Bureau Environmental Coordinator, who introduced a panel of experts on environmental issues in Asia, the Middle East and Northern Africa.

Dr. Sherif Arif was introduced as the "technical keynote" speaker by David McCauley of the Global Bureau's EPIQ mechanism (helping with the organization of the workshop). Dr. Arif is the World Bank's Environmental Coordinator for the Middle East and Northern Africa.

He has recently completed an environmental strategy for the Bank's assistance to this region, and his presentation summarized the major environmental challenges--foremost among them water scarcity--facing the Near East and steps that should be taken to address them. Discussion centered on water management issues and especially the introduction water prices to ration scarce resources.

The second speaker was Mike Rock, an environmental economist at Winrock International specializing in industrial policy in East Asia. Dr. Rock discussed the findings of recent studies in the region-including a detailed survey in Semarang, Indonesia--which provide clearer understanding of the factors affecting manufacturer's pollution abatement behavior. The findings indicate that firms respond not only to the regulatory climate but also to market signals and community pressures to reduce their pollution. He suggested that this argues for a new set of

environmental policies in which regulatory agencies should work with communities and markets to influence the environmental behavior of manufacturers. The third speaker of the opening session was Thomas Naff, a noted Middle East scholar from the University of Pennsylvania. Prof. Naff argued strongly for greater attention to the free exchange of information on water resources as a necessary condition for the sound management of this resource.

While explaining the advantages of a free exchange of such information in the countries of the Near East, he acknowledged that water data rarely is made available even across domestic agencies, let alone to neighboring countries or to the general public. He suggested that with advances in remote sensing and the explosion of information being made public through the Internet, the days of using "information as power" in the Near East may be numbered.

The morning session's final speaker was Rick Hill, Director of Intertect, a Washington, DC disaster response and preparedness firm. His remarks centered on the links between environmental management and regional security issues in South Asia.

Mr. Hill summarized the results of a recent survey on this subject and pointed out how human population pressures on scarce natural resources can reduce the resilience of the environment to external stresses such as natural disasters. He also noted some apparent contradictions between the demands of economic development and stable societies-including rapid energy demands, urbanization and the rise of radical environmentalism. He concluded

by suggesting that a closer working relationship should be forged between environmental staff and those engaged in disaster preparedness and relief to collectively address the underlying causes of stress due to pressures on natural systems from human activity.

The session's discussion periods saw an active exchange of views between Workshop participants and the speakers. In particular, several members of the audience seemed impressed with the new vision for a closer engagement between governments, communities and the private sector proposed by Mike Rock as an alternative to the common thesis of "grow now, clean up later."

Global Bureau Energy Office Sponsors Climate Change Session

The afternoon session of the opening day's meetings also involved both the ANE environmental officers and the US-AEP staff in plenary.

The meeting was organized by the Global Environment Center's Energy Office and was opened by the Directors of the Energy Office, Jefferson Seabright, and of the Environment and Natural Resources Office, William Sugrue.

After preliminary remarks by both office heads on the importance of climate change

issues and the five-year and \$1 billion program of USAID to address these problems, the meeting turned to a series of presentations on the underlying science and international responses.

Climate change expert Douglas Fox reviewed the compelling scientific case supporting the existence of the global warming phenomenon and its likely consequences.

State Department representative Duncan Marsh provided the audience with considerable background information on the elements of the Framework Convention on Climate Change as well as the provisions of the Kyoto Protocol--explaining their importance to and possible effects on US international environmental policy.

In a session moderated by Karl Hausker, William Futrell and Ann Hambelton further elaborated on the complicated implications of international efforts to address global warming for USAID's programs in the ANE region. Questions from the audience centered on the need for further definition of measures that can meet the economic growth goals of developing countries while also reducing net greenhouse gas emissions.

Pre-Workshop Energy Training Day Well Received

About one-half of the ANE Environment Officers came

to Baltimore a day early to take part in a one-day training program on energy issues sponsored by the Global Environment Center's Energy Office. Topics ranged from issues relating to electricity sector restructuring to energy efficiency and renewable energy resources development. A major emphasis of the program was the initial definition of a new theme of the US-Asia Environmental Partnership promoting attention to addressing the problem of global climate change.

US-AEP's clean production programs already encourage the adoption of energy-saving technologies, and these are to be supplemented by a range of additional measures aimed at reducing net greenhouse gas emissions.

Additional elements are still to be developed, but they will involve the promotion of other measures by industries and municipalities which can help reduce the underlying causes of global warming.

US-AEP will also be asked to carefully monitor its climate change activities so that these may be attributed to the spending targets of the Agency's overall Climate Change Initiative.

ANE Environment Officers Workshop Summary

Management Issues and Partner Relations the Focus of Day Two

Morning Session Covers Environmental Workforce and Reg 216

Ben Stoner of the Global Environmental Center opened the first ANE-only session of the joint ANE-AEP workshop with a general discussion of institutional resources, trends and issues affecting ANE region environmental officers' effectiveness, including funding, staffing, management tools and information support. Mr. Stoner noted the generally declining level of USAID funds and staff while pointing out the availability of such tools and resources as the **Environmental Sector Council and** the Environmental Information Clearinghouse (EIC). Discussion during and after his presentation touched on the nuances of backstop

classifications and the need for an information flow around the sector council.

Jeff Goodson of the ANE Bureau followed Stoner's presentation with a discussion of important elements of Regulation 216 compliance for ANE Mission Envi-ronmental Officers (MEOs). Mr. Goodson focussed in particular on the three categorical exclusions under Regulation 216, "human subjects," biosafety and disposal of human waste. He also discussed special considerations for implementation and conditions under which clearance remains in the field. He also provided an overview of the issues and challenges posed by the arsenic problem in India and Bangladesh deriving from the widespread introduction of tube wells.

Panel Offers Field-based Perspectives

A panel of field environmental officers representing USAID Missions in Morocco, India, Lebanon and Indonesia outlined some of the prominent issues facing MEOs in today's development environment. Guided by Moderator Alan Hurdus, Richard Edwards built on the discussion in the preceding session by explaining how Reg-216 compliance has become a constructive element in the USAID/India Environmental Program's pursuit of sustainable development, while also offering a list of useful guidelines for managing compliance efficiently. Emphasizing the importance of open consultation and communication with AID/W, Mr. Edwards concluded by providing a heads up on the style and content of USAID Inspector General program audit, while recommending that future such audit teams include at least one environmental expert.

Sana Saliba followed with a succinct statement of the USAID/Lebanon Environmental Program's need for advisory support on moni-toring and indicators development, both from AID/W and from Missions with established environmental programs. Subsequent discussion focussed on the need to address this topic broadly in the context of the Results reporting and resources request (R4) process while simultaneously streamlining R4 reporting.

Agus Widianto delivered a poignant description of **USAID** Foreign Service Nationals (FSNs) generally as well as in the Indonesia Mission specifically. Notwith-standing the critical and increasing role played by FSNs in carrying out program work, he observed that they continue to occupy a peripheral position in USAID's organizational structure. In the case of Indonesia, Mr. Widianto described how the affects of the ongoing financial crisis combined with slow response from USAID are eroding FSN morale and adversely affecting their effectiveness.

Moderator Hurdus guided the remarks of the panelists while providing inputs based on his experiences with the USAID/Morocco environmental program.

Changing USAID-Partner Relationships Focus of Post Lunch Session

An audience of 27 partner organization

representatives joined the nearly 40 USAID participants in the ANE Bureau's Environmental Officers' Workshop for a talk by Tom Fox, USAID Assistant Administrator for Policy, Planning and Coordination. Mr. Fox took advantage of the forum to outline issues and concerns raised "widely and broadly" by various organizations on the affects of AID's management for results approach on USAID-Partner relations. Mr. Fox provided a succinct analysis of this developing relationship and listed factors that, in his experience, can engender tension in it. He followed up with an overview of USAID's steps to date in response to partner concerns, which include extensive internal discussion and a series of formal consultations leading up to treatment of this subject as a "major theme" at the upcoming USAID Mission Director's conference. Members of the audience commented on contracting constraints that presented obstacles to full cooperation with USAID. USAID field technical officers acknowledged the challenges presented by the need to manage for results through grants and cooperative agreements, but also suggested that problems in the field may not be as difficult as indicated by DC-based NGOs. In responding to these comments, Mr. Fox revealed that the R4 process would be undergoing a simplification, resulting on a focus on information essential for AID/W to review.

ANE Program Interests Discussed at

Partner Open Forum

What's the most efficient way to match implementation needs with institutional abilities? The '98 USAID ANE Bureau Environment Officers' Workshop adopted a laissez faire approach to this question this afternoon by inviting a group of partner organizations now engaged in work on various USAID activities to spend an afternoon in informal, small-group discussions. Making a virtue of necessity, the Workshop organizers took advantage of the late relocation of the conference to Baltimore from its originally planned site in Cebu in the Philippines to bring experts from the field into direct contact with professionals in fields relevant to ANE Mission and Bureau programs. At the conclusion of the presentation by USAID Assistant Administrator Tom Fox, the attending partner representatives and ANE Environ-mental Officers introduced them-selves one by one, then adjourned to meet informally on the basis of coinciding interests and capabilities. This session provided Washington-based partner organizations and USAID field staff with an rare and valuable opportunity to meet face-to-face while identifying and discussing areas of mutual commitment and interest.

Fox and Field Reps Draw Large Partner Turnout

Undaunted by the long drive to Baltimore, a large number of committed USAID partner organizations braved the zone beyond the beltway to meet with USAID field officers and participate in a session led by USAID Assistant Administrator Tom Fox on "New Thinking on Working with USAID's Partners." No less than 27 representatives from 17 organizations availed themselves of the opportunity.

ANE Environmental Officers Workshop Summary

Integrated Water Resources Management and Urban/Industrial Pollution Key Themes on Friday

Water: An Indispensable Resource

G/ENV Water Team Unveils Strategic Plan

Development professionals must focus on water resources management because of the critical role water plays in nearly every sector of development work. This was the message delivered by Michael Philley at the outset of this morning's session. During the session, the G/ENV Global Water Team (GWT), with membership drawn from AID/W and Missions, explained how it supports integrated approaches to water and coastal resources management. The GWT unveiled a recently completed draft strategic plan for comment by participants. Three GWT members made presentations on Integrated Water

Resource Management (IWRM) based on their own individual experiences.

Dr. Vahid Alavian outlined an emerging IWRM strategic framework, suggesting that this approach to water resource allocation, development and management will be broadly accepted in the future. Dr. Alavian also provided a checklist for planning IWRM activities, including: perception of water (culturally, from a religious standpoint and regionally); development objectives; environmental, social and public health impacts; decision makers and stakeholders; institutional and human resources; urbanization; and the role of women and transboundary issues.

David Gambill emphasized the importance of establishing institutional capacity and building stakeholder participation by politicians, regulators, and especially women, at every stage of the process.

Morris Israel

concluded this set of presentations by discussing his experiences with IWRM in USAID/El Salvador, noting that water activities there form a theme that cuts across the Mission's strategic objectives.

Field Experience with IWRM

Tom Rhodes moderated a presentation of views from the field on IWRM by a panel comprising Craig Anderson, Alan Hurdus, Azharul Mazumder and Abdullah Ahmad.

Mr. Anderson kicked off the session with a overview of water-related activities in Egypt, putting present work in perspective against a background of 10 years of USAID water management-related work in Egypt. Departing from the infrastructural focus of most of its water work in the past, the main thrust of USAID's present work in on policy: how can the systems already in place be used best? The

bulk of USAID/Cairo's current water work, encompassing a water communication program, a water advisory group, and a water policy analysis team, seeks to respond optimally to this question. The water analysis team in particular works to improve data and its management through a participatory process to use it in identifying effects on policy. The "guts" of this program is the establishment of annual policy benchmarks with associated cash transfers for their attainment. Mr. Anderson noted in conclusion that achievement of policy change is among the most difficult forms of development work he has encountered.

Azharul Mazumder's presentation on USAID/Bangladesh's activity called Management of Aquatic **Ecosystems through Community** Husbandry (MACH) shifted attention from a comprehensive water management program to a set of activities coordinated around the management of floodplain open-water fishery resources. The premise of MACH is that the interactions among people, land, and water are critical to the food supply in Bangladesh. In recent years the per capita consumption of fish has declined while prices have increased. Many of the causes of the decline in fish consumptions are directly or indirectly manmade. MACH pursues action along several parallel and interrelated paths to improve access to and ecologically sound management of Bangladesh's rich inland water resources.

In this session's third presentation, Alan Hurdus drew a picture of a third country Mission's approach to water resources management. The direct

relationship between water supply and economic performance in Morocco has prompted USAID to assign a high priority to the sustainable management of water resources. Analysis and projection of water supply and demand in Morocco indicate that the country's small current surplus will become a deficit during the coming 20 years. The Mission's response is a strategy of water resources management that cuts across the agricultural, urban and industrial sectors, with actions affecting the policy framework, the availability and use of environmental technologies, and increased public participation. Morocco's established water-related activities and distinctive approach to carrying out this strategy have already led to an impressive list of achievements.

Abdullah Ahmad presented a fact-filled, detailed overview of water availability and usage in Jordan. Emphasizing the relative scarcity of water in Jordan, Mr. Ahmad described the status of renewable water sources and identified problems and consrtraints associated with each one USAID/Jordan's water management program seeks to improve water resources management by: (1) stronger water sector institutions (policy development and regulation, human resources development, data acquisition and public awareness); (2) increased water use efficiency (restructuring and rehabilitation of the greater Amman water distribution system, water treatment plants and infrastructure); and (3) improved quality of wastewater (wastewater treatment plants). The Mission focuses on the dividends from the peace treaty with Israel and its

beneficial affects. Audience comments in response to Mr. Ahmad's remarks touched on the importance of controlling distribution and water pricing. Mr. Ahmad expressed his belief that regional cooperation holds great potential for helping to improve water supply in Jordan.

Transboundary Natural Resource Management

The focus of Friday morning's last set of presentations broadened to look at water resource management as a transboundary natural resource management issue, as Kenneth Baum moderated panel presentations by Ben Stoner, John Matuszak and Curt Bennett.

Ben Stoner introduced the Southeast Asian Environmental Initiative (SEA-EI) and a new Nile River Basin Initiative (NRBI). Under the latter program, three USAID Bureaus, ANE, AFR and Global will seek to support the State Department's and World Bank's Nile River Basin actions through: (1) introduction of a monitoring, forecasting and Simulation (MFS) system, and (2) an environmental opportunities and constraints analysis in several of the Nile River Basin countries. Under the SEA-EI, USAID is supporting ongoing activities with a regional program to reduce the occurrence of large-scale land and forest fires, through a strategy of: (1) improved forest management; (2) improved fire prevention and fighting; and (3) improved climate impact forecasting and environmental monitoring.

John Matuszak

identified IWRM as an area rich in opportunities for donor coordination, observing that water is an often overlooked but increasingly predominant issue. With the recognition of the importance of water resource management has come investment of resources on a large scale by international banks and donors. The United Kingdom, for example, devotes approximately half of its international assistance budget to water-related work. Current international agreements are moving towards integrated treatment of water issues.

Curt Bennet emphasized the importance of data and information management, noting that acquisition and processing of accurate data forms the foundation of effective water resources manage-ment. He underscored the need for care and attention at each step of the acquisition-processing-analysis procedure.

NOAA's

Candace Clark joined the panel to present brief remarks on the legacy of El Nino and the prospective affects of La Nina.

Taking the Initiative on Urban and Industrial Pollution

Progress on Urban

Environmental Infrastructure

Earl Kessler moderated presentations by P.U. Asnani, James Stein and Tina Dooley-Jones on USAID's progress in the development of urban environmental infrastructure in India, Indonesia and Morocco. Ms. Dooley-Jones reviewed the current development challenges and opportunities facing Morocco, particularly in urban areas, and described the two USAID/ Moroco urban environment-related actions, a technical assistance grant and a \$100 million Environmental Credit Program. Most of the credit program resources have been used for the Agence Nationale de Lutte Contre L'Habitat Insalubre (ANHI), although a significant portion has also gone to work with the Fond d'Equipement Communal (FEC). General outcomes of the program include greater operational efficiency and environmental awareness, as well as encouragement of NGO and stakeholder participation and partnership development in planning and infrastructure development. USAID's experience with ANHI points towards innovative linkages across sectors, while its work with FEC has defined the need to identify pilot projects thematically similar to those already undertaken but at different stages and scales of development, the importance of carefully screening candidate pilot projects, and the need to layer activities in order to enable optimal use of resources.

Jim Stein provided an overview and summary of lessons learned from his rich experience in financing urban

infrastructure in Indonesia. Improving urban management and service delivery requires focus on financial resources, local government capacity and the policy-regulatory environment. An effective program will work on several fronts at once, e.g., with public sector grants, public and private sector debt, and publicprivate participation. Financing options should complement, not compete, with each other, and macro-economic conditions must be made attractive to private investors. Local stock and bond markets must be conducive to investment, and policy should emphasize financial transparency while creating mechanisms to attract private investment. In addition, the investment community should be trained to evaluate infrastructure projects and work within a risk-reward structure. Existing untapped Indonesian sources of capital mean that the local debt market can become a good source of funds, once the current crisis wanes.

P.U. Asnani wrapped up this set of presentations by describing the impressive successes of USAID/India's urban program in Ahmedabad. In approaching the problem of reducing pollution, the Mission graded the risk posed to the population by pollution according the medium, establishing a ranking of (1) air pollution (highest risk), (2) water, and (3) solid waste. In response to vehicular air pollution, a semiannual vehicle testing regime was introduced to encourage a shift from the use of kerosine to petrol to fuel motors. Working with the water supply, large-scale replacement of corroded pipes and connections dramatically improved

access to clean water, thereby reducing health risks. A concentrated effort was successful in remediating 30 years of unregulated industrial waste water in a period of 30 days. A synchronized solid waste pick-up and disposal system has reduced the quantity of solid waste in streets, and a large increase in the number of community toilettes has reduced the incidence of open defecation.

Asian Focus on Industrial Environmental Management

Robert MacLeod moderated the late-afternoon presentations by Owen Cylke, Julie Haines and Amitabha Ray on industriale environmental management. Mr. Cylke presented the USAEP program's recent work in this area, reviewing relevant program background and experience. USAEP's industrial environmental results framework is centered on the "environmental drivers" of public policy and market pressure, together with technology transfer. Building on existing USAEP assets and thinking, the program is moving forward with the concept of a fomenting a "clean revolution," that focusses on reducing pollution intensity per unit of output by getting inside of the production process, marshaling a series of "policy helpers" and encouraging new investment to build sustainability into the industrial sector. In pursuing its policy program, USAEP is dealing with a gamut of issues, some preexisting, such as climate change and energy direction, some, such as the Asian financial crisis, of recent origin.

Julie Haines followed with a discussion of the Clean Technology and Environment Management (CTEM) program under USAEP, which works in five areas: (1) ISO, EMS, and environmental stewardship; (2) environmental voluntary standards in industry; (3) environmental awareness and responsibility within the supply chain; (4) environmental extension systems; and (5) financial due diligence. CTEM pursues discrete objectives and strategies in each of these areas to promote sustainable, responsible industrial environmental management.

Amitabha Ray closed out this set of presentations with an overview of the USAID/India Clean Technology Initiative (CTI). CTI strengthens volountary incentives for enhancing the capacity of Indian industry to adopt clean, climatefriendly technlogies and certified environmental management systems leading to energy efficiency and reduction of greenhouse gas emissions. In pursuing this goal, CTI emphasizes energy efficiency, production process efficiency, and improved product development. Working with public and private sector partners in India and the U.S., the CTI program encompasses four components: (1) information, analysis and outreach; (2) private sector environmental incentives; (3) professional and institutional capacity development; and (4) commercially-oriented technology coorperation. The program's major accomplish-ments to date include providing environmental technology information in India and the U.S. and promotion of information networks, initiation of and technical assistance for ISO 14001 pilot demonstration projects, and support for the devel-opment of a GEMI-type organization in India.

A Fresh
Perspective on
USAID's Urban
and Industrial

Environmental Assistance

Terry Davies, a Senior Fellow at Resources for the Future (RFF), closed out the session with a series of observations on the material covered. Mr. Davies noted the importance of testing new approaches spread over a wide spectrum of problems and contexts and the critical role of incentives in urban and industrial environmental management. Understanding how to change behavior is fundamental to such management, he observed. He also commented that the design of environmental management programs is extemely difficult, and expressed surprise that no failures had been discussed during the afternoon. In his view, a step-bystep, incremental approach is the right way to procede in program design. Finally, Mr. Davies cautioned to be aware of the gap between rhetoric and reality: superficial change and innovation is often underlain by stasis and intertia in an institutions' core programs.

ANE Environmental Officers Workshop Summary

Monday Sessions Provide Ideas on Organizing and Financing Natural Resources Programs

CBNRM: Still Promising or Passe?

The week's first session was moderated by EPIQ's David McCauley, with panel presentations given by Barbara Belding, Agus Widianto and Janis Alcorn. The group examined experience on Community-Based Natural Resources Management (CBNRM) with a focus on applications to tropical forests.

Barbara Belding led the participants through a participatory exercise to sensitize people to gender biases and demonstrate the limits of understanding that can confront even a highly trained and seasoned group of development professionals in drawing conclusions about unfamiliar cultures. Asking the participants to guess which gender would be most likely to perform certain jobs, Ms. Belding was able

to cite specific examples in which the group's assignment of task by gender was nearly opposite the expectation of empirically observed patterns.

Ms. Belding, Deputy Director of the Global Environment Center's Office of **Environment and Natural** Resources, discussed recent World Bank and USAID workshops on CBNRM, citing the approximately 400 papers submitted at the World Bank event as evidence of the wealth of interest and experience in this area. Ms. Belding also traced the important relationships between the legislation-policy context and community-based actions, such as CBNRM, by inviting participants to cite instances from their professional experience in which a communitylevel development activity was made possible by a policy-level action.

Agus Widianto, Manager of the Forestry component of USAID/Indonesia's Environmental Strategic Objective

Team, followed by describing his Mission's newly revised approach to community-based forest management, putting the new approach into a historical context. Indonesia has taken a concessionaire approach to forestry since 1967, focussing on generation of foreign exchange by large enterprises. This system however entailed the disadvantages of economic centralization, statebased control, and unwarranted conversion of millions of hectares of some of the most biodiverse tropical rain forests remaining on the planet. Decision making under this approach was unilateral and centralized, and the system led to numerous social conflicts, huge ecological problems, the creation of a dominant set of large conglomerates, and weak economic resilience at the community level. With the recent

change in the Indonesian government, a new model is being adopted of "forests for the people." The goal of this approach is to achieve "just and democratic

management of forest resources for people's welfare based on sustainable resources and ecosystem." This change in approach offers USAID/Indonesia an opportunity to support reform forces to speed up change by working with agroforestry and other community forestry practices to improve local income generation and food supply through adjustments to policy and field demonstration activities. In many cases this approach involves the validation and expansion of existing historical community-level CBNRM practices.

Janis Alcorn, Asia-Pacific Director of the **Biodiversity Support Program** (BSP) based at the World Wildlife Fund, presented some of the results of BSP's extensive experience with community-based natural resources management systems. Based on this experience, decentralization can be expected to improve the quality of forestry management. Centralized managing entities tend to lack knowledge and be motivated solely by profit, while communities have better knowledge and better outreach abilities. Donors are tending to shift their forestry-related support from central governments to community-level organizations. BSP has examined a series of cases, however, to determine whether local forestry management actually produces better outcomes and has come up with mixed results that provide no simple model for forest management improvement through decentralization. Seven enabling conditions were identified: (1) authority and responsibility at the community level; (2) partnerships; (3) strong leaders; (4) stakeholder participation; (5) technical,

political and financial skills; (6) a mix of funding levels and sources; and (7) creation of cross-level tension across local and national levels to help ensure accountability. Important cross-level dynamics include: (1) contestableness; (2) cross-sector communication and a shared knowledge base on resources and dangers; (3) space for experimentation (often provided exclusively by donor interventions); and (4) memory of past technical and institutional experience. Five kinds of techniques have proven particularly useful: (1) cross-scale mapping; (2) cross-scale focus groups; (3) networks, information sharing and apprenticeships; (4) communitybased monitoring for adaptive management; and (5) cultural revitalization.

Indonesian, Philippine and Egyptian Experience Emphasized in Coastal Management Review

In a sub-session ably moderated by Barbara Best of the Global Environment Center's Office of Environment and Natural Resources, participants heard presentations on current coastal resources management activities in Indonesia, the Philippines and Egypt.

Lynne Hale, Associate Director of the Coastal Resources Center of the University of Rhode Island, described ongoing community-based coastal resources management activities in North Sulawesi province in Indonesia. She indicated that the program has been used as the basis for several community-led resources management changes--including a response to a reef-threatening outbreak of the crown-of-thorns starfish--as well as building close links with local and regional governmental authorities. Though the area highlighted covers only 6 hectares, she tried to show how it might be replicated within the district, province and nation to cover a vastly larger area and numbers of coastal residents.

Leila Peralta, USAID/Philippines officer for that Mission's Coastal Resources Management Project, described the nature of their work and some preliminary conclusions on effective approaches to coastal management based on their experience. The key conclusions were: (1) to help forge close working relationships between local communities and local government entities; and (2) to take a broad-based perspective on the coastal resources to be managed, incorporating concern for and understanding of the interactions between the natural system and various human economic activities based on management of this system.

Anne Patterson, USAID/Cairo's officer overseeing that Mission's program on "Environmentally Sustainable Tourism" described how the Gore-Mubarik dialogue led to inclusion of this program into the two-country cooperative agenda.

Activities have centered on developing a close collaboration with the tourism sector on Egypt's Red Sea coast to identify and address important environmental problems. This has led to a focus on coral reef protection. Based on a model developed through a European Union-funded program in the Gulf of Aqaba, a particular emphasis has been placed on the provision of mooring buoys to reduce coral damage from the anchors of dive boats. Because of the close cooperation with the hoteliers and dive shop operators, however, the USAID-supported effort has proved far more sustainable than that of the EU in the Gulf of Agaba.

Edwards the Lunchtime Speaker on India's Climate Change Work

Workshop
participants were offered a special
presentation during a working
lunch by Richard Edwards on
USAID/India's programs to
address Global Climate Change.
He described a five-pronged
approach: technical assistance;
training; partnerships; catalytic
leveraging of resources; and an
emphasis on commercialization.

India is the sixth largest emitter of greenhouse gases and one of USAID's 10 key countries/regions. The Mission has recently refocussed its environmental programs on this topic seeking "no regrets" actions that make sense both in terms of

their net benefits to the local economy as well as the global environment.

Edwards described a wide range of USAID interventions-from work on clean coal technologies to management of electricity demand--that are being used to accomplish these GCC objectives. He argued for continued support to the country despite the foreign policy problems introduced by India's controversial nuclear testing policy. Because of the resulting sanctions, funding for new activities remains suspended. If this continues a decade of work in these fields will be threatened and the program will come to an end in three years or less.

Expanding Conservation Financing Approaches

After lunch the day-long Friday session turned to New Opportunities for Conservation Financing. Jim Hester, Agency Environmental Coordinator, moderated the subsession and led it off with a presentation on new legislation enabling debt relief for activities related to tropical forest conservation. The other panelists were Mary-Ann Guerin-McManus, Director for Conservation Financing at Conservation International and Ketut Djati, Manager of the Protected Areas component of USAID/Indonesia's Natural Resources Management Program (SO3).

Hester described a recent addition to the US Foreign

Assistance Action providing for "Debt Reduction for Countries with Tropical Forests". He explained the opportunities this new legislation will create as well as its limitations. A principal constraint will be that countries need to qualify based on an assessment of their political, economic and technical conditions. The program is managed by a committee chaired by the Department of Treasury.

Mary-Ann Guerin-McManus described the evolution of debt-swaps as a conservation financing tool as well as some other mechanisms available. She began with a brief overview of conservation financing approaches covering the establishment of endowments, bioprospecting contracts and other commercial relationships establishing compensation schemes for sustainable harvested natural products. Following this review, Guerin-McManus described how Conservation International and other organizations have brokered debt-swaps and their renewed interest with the passage of the new legislation.

Ketut Djati then gave a concrete example of how debt-swaps may apply and help in Indonesia. He described the forest conservation needs of Indonesia and suggested that the current financial and foreign exchange crisis is expected to create a somewhat unique demand now met by the new mechanism created by the US Congress. The Indonesia Mission's review of these prospects will be completed in November.

Discussion on this topic centered on the eligibility criteria for the new debt-swap program an other issues relating to the efficacy of conservation financing mechanisms. Hester and Guerin-McManus provided details of how they expect the program to work and suggested that economic, technical or political considerations may stand in the way of some countries' participation.

Loans and Credits Return to USAID's Portfolio through DCA

The Development Credit Authority (DCA) will soon offer new opportunities to widen the range of assistance tools and reintroduce loans and loan guarantees to the portfolio of USAID assistance mechanisms. This was the main thrust of the afternoon panel moderated by David Painter, with presentations from Mike Kitay and John Wasielewski. Kitay is in the General Counsel's Office of the Global Bureau and Wasielewski provides technical support to Missions on DCA out of the Global Bureau.

The three speakers told the participants that Missions will soon be able to convert their Development Assistance resources to use as loans or loan guarantees in support of environmental and other projects which can show adequate financial returns. When appropriate, Missions will soon be able to supplement development grants with direct loans (of dollars) or

loan guarantees (in local currency). By leveraging other financial resources this should expand Mission's total funding impact.

The DCA will process requests from the field for such loans quickly and with a minimum of essential input from the applicant. It also will authorize a transfer to Washington of the budget funds necessary to leverage the corresponding loan funds.

This new resource could be particularly useful to field officers for activities that incorporate a combination of technical assistance and institution building activities with the acquisition of large-scale equipment. Grant money could be used for the direct assistance, while loan funds could be made available for equipment acquisition with only a small amount of additional funding to cover the loan's "true cost." Fears that this approach could lead over time to a highly specialized USAID portfolio, containing few "end-of-pipe" activities, are misplaced, since field officers have full control over the decision whether loan funding is appropriate in any given case. The DCA is not yet fully approved. However, the speakers were optimistic that it soon will be operational, and they encouraged Missions to begin project preparation.

Resources for Donor Coordination

Kenneth Baum moderated the final set of presentations for this day, in which Helene Rosenberg, USAID Officer in the US Embassy in Tokyo, described opportunities to work together with the Japanese aid agencies, and Michael Colby, Senior Environmental Policy Advisor at the U.S. Treasury's Office of Multilateral Development Banks described his office's interests and links to USAID's work.

Rosenberg informed the participants about ongoing US-Japanese aid cooperation and particularly in environmental assistance. She said that environment is the focus of the "common agenda" for Asia, efforts are currently underway to expand connections with the private sector and the NGO community to build a broad coalition for financial and technical support to environmental programs in the region. She placed heavy emphasis on the potential for leveraging the \$1 billion per year spent on environmental projects by the Japanese Organization for Economic Cooperation and Financing (OECF).

Mike Colby, formerly of the USAID ANE Bureau, finished out the day's session with a brief presentation on the Treasury Department's monitoring of multilateral development bank's (MDB) environmental behavior as mandated by the Pelusi Amendments. He appealed for help from Mission environmental staff to identify MDB projects with potentially significant environmental impacts as early as possible so that the US Government's full resources can be used to influence their appropriate design.

ANE Environmental Officers Workshop Summary

Workshop's Final Session Forum on Indicators Reporting and Strategic Planning

There's the Rub: Indicators and Reporting

John Wilson and Ben Stoner led a group discussion of performance monitoring and indicators, linking this discussion to topics touched on earlier in the Wednesday sessions. There is some frustration with the current system because of the amount of time it requires and skepticism was expressed about the value of the results it generates. Wilson observed that the resource allocation system is "performanceinformed" rather than "performance-driven" and suggested that the current approach can and should be streamlined. He also repeated the results of an informal study suggesting that a few well-chosen indicators are as good as large number of indicators in generating support for Mission programs. Stoner invited

comments on useful monitoring tools outside of the formal AID reporting system.

In the ensuing discussion, the R4 was lauded by some as a useful management tool, but also questioned as a evaluation tool. The annual review was faulted for not allowing accurate assessments of activities that require more than one year to show concrete results. Other participants strongly supported the managing for results approach and the R4, saying it pushed officers to do more than they would do otherwise. One participant questioned how the limited program information included in the R4 submission to AID/W could be used to rank performance fairly, especially between Missions, in the competition for funding. Some apprehension also was expressed about indicators being used to "hang Missions" by auditors.

The session leaders noted that Mission strategy is also part and parcel of Agency and Bureau strategy, they and requested a free flow of information and their early inclusion in Mission strategic planning.

Strategic and Policy Thinking the Subject of Final Panel

The workhop's closing technical topic dealt with the cross-cutting issues of strategic planning, policy-based assistance, and the role of public awareness in environmental programs. Glen Anderson, an EPIQ policy consultant, addressed the group on planning and assessment approaches, presenting three examples from his own experience. He first discussed National **Environmental Action Plans** (NEAPs), mechanisms for identifying, assessing and prioritizing environmental problems and elaborating actions. The NEAP process requires (1) organization of an assessment team; (2) compilation and assessment of problems in terms of health, economic and environmental costs; (3) setting of priorities and formulation of actions; and (4) implementation of actions. NEAPs have been carried out in a number of countries, but often suffer from weak attention to strategic thinking and followthrough in the implementation phase. From NEAPs, Dr. Anderson moved on to the **Environmental Sector Assessment** (ESA) he led last year for USAID/Cairo in Egypt. The objectives of the ESA were to identify policy, regulatory and institutional constraints to effective USAID project assistance and to develop key policy reforms for

selected environmental sectors. The ESA process required (1) a review of prior and current donor assistance, government strategies, laws, regulations and policies; (2) stakeholder involvement; and (3) negotiation of components of the USAID environmental policy program. Dr. Anderson further described a second country environmental sector assessment he recently conducted in Jamaica. Based on these and other experiences, several key elements for successful assessment were advanced: (1) expressing environmental priorities and actions in economic terms is important to counterparts; (2) policy constraints are real and affect what can be accomplished; (3) assistance often can be more valuable if policy and institutional constraints are first addressed; (4) specific attention should be given to the involvement of counterparts and stakeholders; (5) opportunities to leverage assistance resources; and (6) Missions should capitalize on cooperating country selfinterest.

Catalina Jensen followed with a description of recent preparations for USAID/Philippines' Strategic Objective 4 retreat. Taking an innovative approach, her team held a three-stage strategy workshop. In the first stage, outside experts met and, in an atmosphere of free and wide-ranging discussion, generated a list of 33 important environmental issues. The second stage was a civil society workshop, in which participants were asked to review the list developed in the first stage, take them at face value, and react based on their own experience. The result was a narrowed down list. In the third stage, USAID and its partners

examined the revised list in an effort to determine what is actually doable with the limited resources available. Outcomes of this threestep process in the Philippines were an emphasis on the need for biodiversity conservation, an ecosystem perspective on actions, and recognition of the need for full integration of local government with communities. It was also determined that a basic problem in the Philippines is the appropriate pricing of resource use. Ms. Jensen also provided a brief overview of ENRAP program accomplishments to date, including a tax differential between leaded and unleaded gasoline, institutionalization of environmental and natural resources accounting and integration of this approach into all agricultural projects in the Philippines.

Brian Day, a GreenCom consultant, closed out this final workshop session with a well-delivered talk on environmental communications and policy. He echoed one of Terry Davies' comments on Friday by observing that affecting behavior is essential to the attainment of measurable results in an environmental program. While awareness alone is not enough to change behavior, environmental education and communications (EEC) can be an important part of policy formulation, helping with such steps as identification of key audiences, understanding these audiences, involved audiences affected by policy change, educating the public, and conducting formative research to establish a baseline. EEC can also play a role in policy implementation, helping to move policy makers, enlisting journalists to keep environmental issues in the

public eye, helping advocates to rally and, finally, contributing to long-term cultural change through formal education. EEC can play a key role as well in facilitating policy compliance by promulgating the policy and by supplying information that enables those affected by policies to comply in a painless or even advantageous manner. EEC actions early on in and activity can also pay off in effective evaluation an monitoring. Advance assessments of knowledge, attitude and practices (KAP) can facilitate monitoring of progress and the development of indicators.

technical discussions and the opportunity to interact with peers Washington and other field staff.

Workshop Evaluation

John Wilson and Ben Stoner closed the week-long workshop with an appeal to all participants for frank expressions of their views on the merits and demerits of the meeting in the written evaluation forms provided. They noted that many participants had already told them that the meeting had been most useful in helping USAID field staff engaged in environmental work feel more a part of broader Agency efforts in this area. They thanked all who had worked to organize the meeting, including the USAID Steering Committee and EPIQ team, and asked the participants to let the Global Bureau know whether it makes sense to hold an Agency-wide meeting of this kind in mid-1999. Alan Hurdus, speaking on behalf of the participants, thanked the organizers and said that everyone had benefited greatly from both the

Appendix B **ANE Environment Officers' Workshop Attendee List**

US Agency for International Development Asia and Near East (ANE) Bureau Environment Officers Workshop

September 29 – October 6, 1998 Baltimore, Maryland USA

Attendee List

Abdullah Ahmad

USAID/Jordan
aahmad@usaid.gov

Vahid Alavian

NOAA

vahid.alavian@noaa.gov

Janis Alcorn

Biodiversity Support Program jalcorn@usaid.gov

D. Craig Anderson

USAID/Egypt anderson@intouch.com

Glen Anderson

International Resources
Group
anderson@ral.mindspring.com

Sherif Arif

World Bank sarif@worldbank.org

P.U. Asnani USAID/India asnani@ad1.vsnl.net.in

John Austin

G/PHN/HN

jaustin@usaid.gov

Kate Barba

G/ENV/ENR

kbarba@usaid.gov

Curt Barrett

NOAA/Weather Service curt.barrett@noaa.gov

Ko Barrett

G/ENV/Climate Change kbarrett@usaid.gov

Judith Barry

US-AEP

jbarry@usaid.gov

Kenneth Baum

G/ENV

kbaum@usaid.gov

Robert Beckman

INTERNATIONAL RESOURCES GROUP B-1

US-AEP

beckman@usaid.gov

Barbara Belding

G/ENV/ENR bbelding@usaid.gov

Barbara Best

G/ENV/ENR bbest@usaid.gov

John Borrazzo

G/PHN/HN jborrazzo@usaid.gov

Dennis Cengel

USAID/Cambodia dcengel@usaid.gov

Doug Clark

IRG/EPIQ dclark@irgltd.com

Michael Colby

US Department of Treasury mcolby@ustreas.gov

Monica Cummings

Department of State mcummings@state.gov

Owen Cylke

US-AEP ocylke@usaep.org

Terry Davies

Resources for the Future tdavies@rff.org

Brian Day

GREENCOM bday@aed.org

Atulaya Dhungana

IIE/Energy Group
adhungana@iie.org

Ketut Djati

USAID/Indonesia idjati@usaid.gov

David Doniger

Environmental Protection Agency ddoniger@epa.gov

Tina Dooley-Jones

RUDO/Morocco tdooley-jones@usaid.gov

Carl Duisberg

G/ENV/EET cduisberg@usaid.gov

Richard L. Edwards

USAID/India riedwards@usaid.gov

Chris English

Department of State

Wadie Fahim Mankarious

USAID/Egypt wafahim@usaid.gov

Ian Fitzsimmons

IRG/EPIQ ifitzsimmons@irgltd.com

Patricia Flanagan

G/ENV/EET pflanagan@usaid.gov

Wesley Foell

RMA

Douglas Fox

Air & Waste Management Association d1fox@aol.com

Thomas Fox

AA/PPC tfox@usaid.gov

William Futrell

Environmental Law Institute

Dave Gambill

G/WIDTECH dgambill@usaid.gov

Ahmad Ghamarian

IIE/Energy Group
aghamarian@iie.org

Jeff Goodson

ANE/ORA jgoodson@usaid.gov

Marianne Guerin-McManus

Conservation International m.guerin-mcmanus@conservation.org

Jeremy Hagger

US-AEP jehagger@usaid.gov

Julie Haines

US-AEP jhaines@usaep.org

Lynne Hale

URI Coastal Resources Center Ihale@crc.uri.edu

Ann Hambleton

Center for Sustainable
Development in the Americas
ahambleton@igc.org

B-3

Todd Harding

G/ENV/EET tharding@usaid.gov

B-4

Karl Hausker

Center for Strategic and International Studies hauskerk@csis.org

James Hester

PPC/ENV jhester@usaid.gov

Belindia Hicks

G/ENV/EET bhicks@usaid.gov

Richard Hill

Intertect rhill@irgltd.com

Alan Hurdus

USAID/Morocco alhurdus@usaid.gov

Morris Israel

LAC/RSD misrael@usaid.gov

Lina Jensen

USAID/Philippines cjensen@usaid.gov

Dana Kenney

USAID/Indonesia dana.kenney@astd.noli.com

Earl Kessler

G/ENV/UP

INTERNATIONAL RESOURCES GROUP

ekessler@usaid.gov

Peter Kimm

US-AEP pekimm@usaid.gov

Michael Kitay

USAID/GC mkitay@usaid.gov

Paul Klimas

G/ENV/EET pklimas@usaid.gov

Alan Krupnick

Resources for the Future krupnick@rff.org

David Leibson

US-AEP dleibson@padcoinc.com

Robert MacLeod

G/ENV/UP rmacleod@usaid.gov

Duncan Marsh

Department of State dmarsh@state.gov

Doug Mason

G/ENV/ENR dmason@usaid.gov

John Matuszak

G/ENV

jmatuszak@usaid.gov

Azharul Mazumder

USAID/Bangladesh azmazumder@usaid.gov

David McCauley

International Resources
Group
dmccauley@irgltd.org

John McMahon

LAC/RSD jmcmahon@usaid.gov

Russ Misheloff

IRG/EPIQ rmisheloff@irgltd.com

Christine Mulligan

AEAI

Mark Murray

G/ENV/EET

mmurray@usaid.gov

Thomas Naff

University of Pennsylvania tnaff@sas.upenn.edu

David Painter

G/ENV/UP

dpainter@usaid.gov

Alex Patico

IIE/Environmental Exchange Program apatico@iie.org

Anne Patterson

USAID/Egypt apatterson@usaid.gov

Leila Peralta

USAID/Philippines lperalta@usaid.gov

Michael Philley

G/ENV/ENR mphilley@usaid.gov

Mark Phillips

G/ENV

markphillips@usaid.gov

Jon Pietruszkiewicz

Bechtel

jpietruszkiewicz@bechtel.com

Amitabha Ray

USAID/India aray@usaid.gov

Tom Rhodes

G/ENV/ENR

trhodes@usaid.gov

David Robinson

ANE/SEA/RPM drobinson@usaid.gov

Mike Rock

USAEP - Winrock
International
mtr@dcmail.winrock.org

Erica Rosenberg

PPC/ENV

Helene Rosenberg

USAID Representative/Japan helene@jsr.net

Joel Rubin

G/ENV/EET jrubin@usaid.gov

Kim Sais

G/ENV

ksais@usaid.gov

Sana Saliba

USAID/Lebanon salibasg@state.gov

Charles Scheibal

USAID/West Bank-Gaza cscheibal@usaid.gov

Jefferson Seabright

G/ENV/EET

jseabright@usaid.gov

Edi Setianto

USAID/Indonesia esetianto@usaid.gov

Richard Sheppard

US-AEP

rsheppard@usaid.gov

James I. Stein

RUDO/India jstein@usaid.gov

Francine Steininger

IIE/Energy Group
fsteininger@iie.org

Ben Stoner

G/ENV

bstoner@usaid.gov

William Sugrue

G/ENV/ENR

wsugrue@usaid.gov

James Sullivan

G/ENV

jsullivan@usaid.gov

John Swanson

G/EGAD

jswanson@usaid.gov

Andra Tamburro

G/ENV/UP

atamburro@usaid.gov

Patrick Terrien

US-AEP pterrien@usaep.org

Dan Vincent

Bechtel dvincent@bechtel.com

Richard Volk

G/ENV/ENR rvolk@tnrcc.state.tx.us

John Wasielewski

G/EGAD jwasielewski@usaid.gov

Christine Wegman

G/ENV/EET cwegman@usaid.gov

Agus Widianto

USAID/Indonesia awidianto@usaid.gov

John Wilson

ANE/SEA/SPA jwilson@usaid.gov